

An Investigation of SMEs' Inter-organisational Knowledge Transfer Needs in Internet Marketing

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Internet marketing, as a key area of e-commerce, plays an important role in SMEs' e-commerce success. It is the use of Internet technologies in facilitating and supporting marketing activities. Its implementation and success require expert knowledge and extensive experience. SMEs admit that they are willing to embrace Internet marketing to enhance their business competitiveness, but do not know where to start and suffer from a lack of guidance. Evidence suggests that Internet marketing analysis is one of the most needed areas of training in e-commerce for SMEs. It is therefore evident that SMEs need to acquire Internet marketing knowledge from external sources. However, the majority of the literature fails to study what specific knowledge they need and from whom they should acquire the knowledge. This paper has addressed these issues through a questionnaire survey of UK SMEs in the service sector. It identifies SMEs' specific transfer needs for Internet marketing knowledge, and discusses strategic issues for improving SMEs' effectiveness of leveraging knowledge.

Keywords: inter-organisation, internet marketing, knowledge transfer, SMEs, survey

Introduction

Due to the importance of SMEs in providing employment in the UK (Skandalakis and Nelder, 1999), the UK government has been actively encouraging them become world leaders in obtaining the full benefits of e-commerce (DTI, 2000). Internet marketing, as a key area of e-commerce, plays an important role in SMEs' e-commerce success (Chaffey *et al.*, 2000). In general, marketing is an area which is not well understood and can be characterised as involving high uncertainty, loose causal structure, and incomplete and dispersed knowledge (Duan and Burrell, 1997). Internet marketing involves using the Internet and related digital technologies to achieve marketing objectives (Chaffey *et al.*, 2000), and so its knowledge is even more complicated. SMEs admit that they are willing to use the Internet or e-commerce but don't know where to start and suffer from a lack of guidance (Duan *et al.*, 2002). Evidence suggests that Internet marketing analysis is one of the most needed training areas in e-commerce for SMEs (Hamill and Gregory, 1997; Duan *et al.*, 2001). All the above arguments suggest that SMEs need to acquire Internet marketing knowledge from external sources. However, the majority of the literature fails to study what specific Internet marketing knowledge they need, from whom they should learn and what strategy they should use to get the knowledge needed. This paper aims to address these issues through a questionnaire survey of UK SMEs in the service sector.

The literature shows that, as well as for marketing, SMEs may access the Internet for other purposes such as e-mail, looking for business information and e-commerce transactions (DTI, 2000). They may also be driven to use the Internet by various factors, for instance, customer demand, improving the range and quality of services offered, avoiding losing market share, convenient communication, reducing costs, increasing speed with which suppliers can be obtained and increasing speed with which goods can be despatched (Hamill and Gregory,

1997; DTI 2000). So, before SMEs' needs for Internet marketing knowledge are identified, their ability to access the Internet, and driving factors to use the Internet should be examined.

A website is a key virtual space for SMEs to set up their image and promote their products, services and policies. Its quality and effectiveness have direct impacts on companies' Internet marketing (Chaffey *et al.*, 2000; DTI, 2000). However, compared to large businesses, SMEs have limited skills to develop and maintain websites. Therefore, the quality and effectiveness of websites in SMEs is a natural concern.

When they do attempt it, SMEs' Internet marketing effectiveness is influenced by many factors. Hamill and Gregory (1997) argue that the most critical one is their workforce's limited knowledge and experience related to Internet marketing. However, management willingness to adopt Internet marketing has also been cited as the principal factor (DTI, 2000). Furthermore, other factors, for example, sources of advice for Internet marketing, technology costs and IT infrastructure, are also considered as principal factors that influence the effectiveness of Internet marketing (DTI, 2000). These will be clarified in this investigation.

The Internet fosters the elimination or adaptation of existing intermediaries as well as the development of intermediaries in entirely new forms (Archer *et al.*, 2000). It provides opportunities to vary the elements of the marketing mix (Archer *et al.*, 2000; Graham and Hardaker, 2000). The most distinctive differences between Internet marketing and conventional marketing are that the former has a virtual marketplace, contains complicated Internet technological elements (website design, banner advertisement design, etc), new tools and ways for marketing analysis (e.g., hits, cookie) (Chaffey *et al.*, 2000). Therefore, Chaffey *et al.* (2000) suggest that Internet marketing involves knowledge such as: the understanding of the new terms (e.g., 'portal', 'search engine', 'clickthrough', 'cookie', 'hits', 'page impressions'); using the new terms to analyse customers' behaviours; developing and implementing Internet marketing strategy; developing the site structure and layout; developing the site content to attract customers to re-visit the site; using online methods to promote the site; maintaining the website; and measuring its effectiveness. The identification of SMEs' needs for Internet marketing knowledge should therefore be considered from these perspectives.

Once SMEs' specific needs for Internet marketing knowledge have been identified, the following step is to identify their external knowledge sources. The possible sources are computer service companies, knowledge broker companies, universities and research institutes, suppliers, customers, and suppliers (DTI, 2000). One of the objectives of this research is to identify SMEs' sources of knowledge.

When knowledge needs and external sources are identified, SMEs will try to acquire the knowledge needed from the identified sources by means of inter-organisational knowledge transfer. The transfer is actually the process of organisations learning from each other. This inter-organisational learning may be considered as being composed of two sub-processes: 1) inter-individual learning between individuals from different organisations; 2) once the individual recipient has acquired the knowledge needed, the conversion of individual learning into organisational learning through organisational internal mechanisms (Chen *et al.*, 2006). From the organisational learning perspective, a criterion for success is that knowledge that is received by individuals from external sources should be communicated and utilised effectively throughout the organisation, so that its business is improved (Argyris and Schon, 1996; Dodgson, 1993; Beeby and Booth, 2000). Szulanski (2000) also argues that a successful

knowledge transfer for an organisation should improve its business performance. So, the effectiveness of SMEs' inter-organisational knowledge transfer is also a matter of concern and will be measured on whether the acquired external knowledge is effectively used by SMEs to improve their businesses.

Compared to knowledge transfer within an organisation, knowledge transfer between organisations is more complicated, and more difficult. An organisation has to face the 'boundary paradox'. That is, its borders must be open to flows of information and knowledge from the networks and markets in which it operates, but, at the same time, the organisation must protect and nurture its own knowledge base and intellectual capital (Quintas *et al.*, 1997; Beeby and Booth, 2000; Chen *et al.*, 2002; Mohr and Sengupta, 2002). SMEs need to have appropriate strategies to address this.

Research objectives

The research reported in this paper sought to examine and discuss these issues for SMEs in the context of the UK service sector. Specifically, it was designed to identify:

- SMEs' abilities, purposes and driving factors for them to access the Internet.
- SMEs' website effectiveness and principal factors affecting website effectiveness.
- SMEs' perception on their relevant employees' needs for Internet marketing knowledge.
- SMEs' external sources for the knowledge needed and their effectiveness in using the acquired external knowledge to improve their business performance.
- SMEs' strategic measures to improve their inter-organisational knowledge transfer effectiveness.

Administration of the survey

Questionnaire design

To achieve the research objectives, a mail questionnaire survey was considered as an appropriate data collection approach. The existing KM and e-commerce literature offers several examples of questionnaire surveys (or assessments) for companies. For instance, a questionnaire survey (Chase, 1997) jointly sponsored by the Journal of Knowledge Management, the Best Practice Club, and the Benchmarking Exchange, contains 18 questions covering knowledge creation, knowledge management level and technology in large companies. An on-line assessment (UCE, 2001) of knowledge management, designed by University of Central England, seeks to measure companies' ability to manage knowledge from the perspectives of knowledge-in-use, knowledge systems, knowledge renewal, and 'knowledge economy' management capability. An international study undertaken by DTI (2000) benchmarks the extent to which businesses are using information and communication technologies (ICTs) to engage in e-commerce in countries such as UK, France, Germany, USA and Japan. It contains 55 telephone interview questions that aim to measure the UK's e-commerce performance against other benchmarked countries. None of these could be directly used for an inter-organisational knowledge transfer survey for SMEs in the context of this research.

The questionnaire developed for this research included 12 questions.

- Question 1 and 2 aim to measure the size of companies and identify the respondents' positions in their companies.

- Question 3 aims to collect information about the proportion of SMEs that can access the Internet.
- Questions 4 – 8 are taken from DTI (2000), and amended to reflect SMEs' current situation (e.g. driving force, main aims, how long the website been developed and effectiveness) in using the Internet or conducting Internet marketing.
- Question 9 is also taken from DTI (2000), and amended to identify the principal factors that influence SMEs' Internet marketing effectiveness.
- Question 10 (containing 7 sub-questions) is designed to identify SMEs' knowledge gaps in Internet marketing.
- Question 11 tries to identify external knowledge sources for SMEs.
- Question 12, taken from Chase (1997), aims to assess SMEs' effectiveness in using the acquired external knowledge to improve their business performance.

Two questions (questions 8 and 12) use a 5-point scale ranging from “1” (very ineffective or unimportant) to “5” (very effective or important), the others are two- (i.e., yes or no) or multiple-option questions. All of them were designed to be as short and simple as possible, so that they are easy to understand and answer by respondents.

The survey was intended as descriptive, not exploratory, in nature and was based on the perceptions of respondents on the above issues. Although perceptual data has deficiencies, Duan and Kinman (2000) argue that there is a strong degree of convergence between the two measurement methods (perceptual vs behavioural), and perceptual measurement should still yield valuable information.

Sampling

This research adopted the EU definition of SMEs, i.e., companies that have between 10 and 249 employees (OJEC, 2001). All SMEs in the UK service sector were extracted from the Financial Analysis Made Easy (FAME) database. From these, 1,000 SMEs were randomly selected as the sample for the survey.

The initial questionnaire was piloted with 100 companies which were randomly selected from the 1,000 SMEs. The owner or manager of each company was asked to respond. Nine effective responses were collected after a follow-up mail, which represents a 9% response rate.

After a minor modification was made to the questionnaire, the formal survey was carried out. Copies of the questionnaire were mailed to the owners or managers of the other 900 SMEs in the sample. After first and second follow-ups, a total of 96 effective responses were received.

Because there was only a minor difference between the pilot and formal questionnaires, the pilot and formal survey responses were analysed together. Therefore, the total number of effective responses from 1,000 SMEs was 105. With 25 returned questionnaires because of incorrect addresses, the actual effective response rate was 10.8%.

Of the 105 respondents, 4 were micro-companies (i.e. having less than 10 employees), and 18 large companies (i.e., each of which has more than 249 employees). This indicated that the companies' sizes may have changed since the statistics were published, or the data in the Fame Database may have been inaccurate. Only 83 responses were therefore actually from

SMEs. These responses were analysed by means of SPSS, and results are shown in the next section.

Survey results and discussion

Profile of participant companies and respondents

Figure 1 provides a profile of the companies participating in the survey. Of them 44.6% are small businesses, 25.3% medium businesses that have between 50 and 99 employees, 30.1% medium businesses that have between 100 and 249 employees.

Figure 2 shows the respondents' position in their company. 38.6% are owners or managing directors, 30.2% marketing or IT managers, 26.5% other managers, others 4.7%. So, the vast majority (95.3%) of them are senior staff.

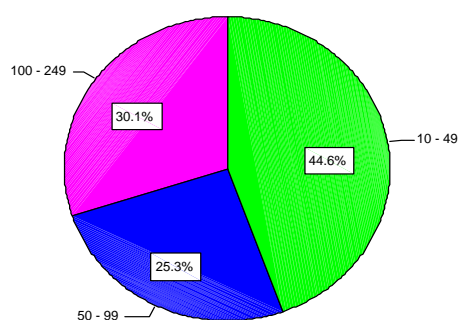


Figure 1 Profile of Participant Companies (N = 83)

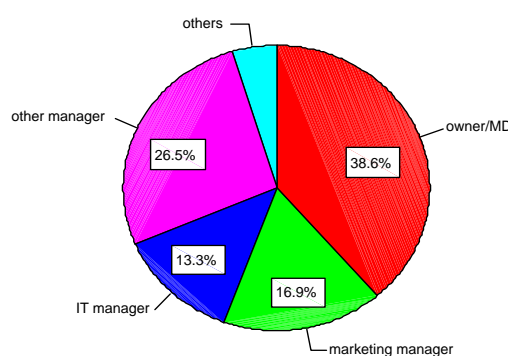


Figure 2 Profile of Respondents (N = 83)

Internet access, driving factors and main purposes

Percentage of companies which can access the Internet

The respondents were asked whether their companies could access the Internet. The results (see Table 1) demonstrate that almost all of them could.

The number of SMEs' responses	Does your company access the Internet?	
	Yes (%)	No (%)
N = 83	98.8	1.2

Table 1: Percentage of companies which can access the Internet

Driving factors for SMEs to use the Internet

Table 2 indicates that participant companies were firstly driven to use the Internet by "convenient communication" (84%); then "improving the range and quality of services offered" (56.8%); followed by "avoiding losing market share" (40.7%), "customer demand" (39.5%), "increasing speed with which suppliers can be obtained" (32.1%), and "reducing costs" (27.2%); the last one was "increasing speed with which goods can be despatched" (7.4%).

Driving factors	Yes (%)	No (%)
Customer demand (n = 81)	39.5	60.5
Improving the range and quality of services offered (n = 82)	56.8	43.2
Avoiding losing market share (n = 81)	40.7	59.3
Convenient communication (n = 82)	84.0	16.0
Reducing costs (n = 81)	27.2	72.8
Increasing speed with which suppliers can be obtained (n = 82)	32.1	67.9
Increasing speed with which goods can be despatched (n = 82)	7.4	92.6

Table 2: Perceptions on the driving factors for using the Internet

The main purposes for SMEs in using the Internet

Table 3 shows that 89% of companies used the Internet mainly for e-mail, 76.9% for looking for business information, 46.3% for marketing, 22% for e-commerce transactions.

Main purposes	Yes (%)	No (%)
E-mail (n = 82)	89.0	11.0
Looking for business information (n = 82)	76.9	23.1
Marketing (n = 82)	46.3	53.7
E-commerce transactions (n = 82)	22.0	78.0

Table 3: Perceptions of the main purposes in using the Internet

Websites and their effectiveness

Percentage of companies with web presence

The respondents were asked to answer whether their companies had their own websites. The results (see Table 4) demonstrate that 79% of them did.

The number of SMEs' responses	Does your company have its own website?	
	Yes (%)	No (%)
N = 81	79	21

Table 4: Percentage of companies with websites

The age of the website

The following question was about how long the websites has been presented on the Internet. In order to see the website age distributions among different groups of SMEs, SMEs were divided into three groups. Table 5 shows that general trend was that the larger the size of the companies was, the longer their website had existed.

Number of employees	How many years has the website existed?					
	< 1 (%)	1 (%)	2 (%)	3 (%)	4 (%)	>4 (%)
10 - 49 (n = 37)	10.7	21.4	28.6	17.9	7.1	14.3
50 - 99 (n = 19)	6.3	12.5	43.8	18.8	6.3	12.5
100 - 249 (n = 25)	5.0	10.0	30.0	50.0	0	5.0
Total (n = 81)	7.8	15.6	32.8	28.1	4.7	10.9

Table 5: Number of years the company website has existed

Website effectiveness

Most SMEs thought that their websites were very effective or effective in improving their communication (66.7%) and marketing (65.6%) (see Table 6). Smaller proportions of SMEs indicated that the purposes were for reducing costs (28.3%) and e-commerce transactions (28.1%).

Area of performance	Very Effective (%)	Effective (%)	Indifferent (%)	Ineffective (%)	Very Ineffective (%)
Convenient communication (n = 63)	8.0	58.7	17.3	7.9	8.1
Reduce costs (n = 59)	2.1	26.2	52.2	7.1	12.4
Marketing (n = 62)	9.0	56.6	19.9	10.5	4.0
E-commerce transactions (n = 57)	9.6	18.5	28.6	16.2	27.1

Table 6: Perceptions of effectiveness in using the website to improve performance

Principal factors for the effectiveness of internet marketing

The respondents were asked to judge which factors were most important for the effectiveness of Internet marketing, their responses were summarised as follows (See Table 7): “knowledge and skills related to Internet marketing amongst a company’s workforce” was considered as the most important factor (70.7%); then “management willingness to adopt Internet marketing (69.0%)”; “IT infrastructure (58.6%)”; “sources of advice for Internet marketing (44.8%)”; and finally “technology costs (36.2%)”.

The factors	Yes (%)	No (%)
Knowledge and skills related to Internet marketing amongst a company’s workforce (n = 58)	70.7	29.3
Sources of advice for Internet marketing (n = 58)	44.8	55.2
Management willingness to adopt Internet marketing (n = 58)	69.0	31.0
Technology costs (n = 58)	36.2	63.8
IT infrastructure (n = 58)	58.6	41.4

Table 7: Perception of factors affecting the effectiveness of Internet marketing

The need to enrich internet marketing knowledge

Table 8 shows respondents’ views on the need for staff to enrich their knowledge in various areas. More than half of SMEs believed that their staff needed to enrich their knowledge further to “develop and implement Internet marketing strategy” (57.1%), “maintain their websites and measure the websites’ effectiveness” (54.0%), and “develop the site content to attract customers to re-visit the site” (51.6%). Nearly half needed to use new terms to analyse customers’ behaviour (47.6%), and sufficiently understand new terms (46.1%). Rather fewer identified the need for more knowledge about using online methods to promote the website” (37.1%), and “design the site structure and layout” (32.3%).

The last result was explained by this being the area where the highest proportion of respondents felt the knowledge was already in place (46.8%). Next to this came existing “sufficient understanding of the new terms” (33.3%).

Relevant Internet marketing knowledge area	Need (%)	No-need		Un-known (%)
		Not required (%)	Knowledge already in place (%)	
Sufficient understanding of new terms (e.g., 'portal', 'search engine', 'clickthrough', 'cookie', 'hits', 'page impressions') (n = 63)	46.0	14.3	33.3	6.3
Effectively use the knowledge of new terms ('clickthrough', 'cookie', 'hits') to analyse customers' behaviour (n = 63)	47.6	19.0	23.8	9.5
Develop and implement Internet marketing strategy (n = 63)	57.1	19.0	17.5	6.3
Design the site structure and layout (n = 62)	32.3	17.7	46.8	3.2
Develop the site content to attract customers to re-visit the site (n = 62)	51.6	12.9	32.3	3.2
Use online methods (e.g., banner advertisement, page and ad impressions, affiliate networks, e-mail) to promote the site (n = 62)	37.1	32.3	21.0	9.7
Maintain your website and measure its effectiveness (n = 63)	54.0	12.7	28.6	4.8

Table 8: Perceived needs for enriching Internet marketing knowledge

Sources for SMEs to obtain the Internet marketing knowledge needed

Table 9 shows that the sources that SMEs would like to use to obtain the Internet marketing knowledge needed. Top source was computer service companies (52.3%), followed by knowledge broker companies (41.5%); customers (40.0%); competitors (33.1%); suppliers (32.3%); and finally universities and research institutes (17.5%).

Sources	Yes (%)	No (%)
Computer service companies (n = 65)	52.3	47.7
Knowledge broker companies (n = 65)	41.5	58.5
Universities and research institutes (n = 65)	17.5	82.5
Suppliers (n = 65)	32.3	67.7
Customers (n = 65)	40.0	60.0
Competitors (n = 65)	33.1	66.9

Table 9: Knowledge sources SMEs would use to obtain the knowledge needed

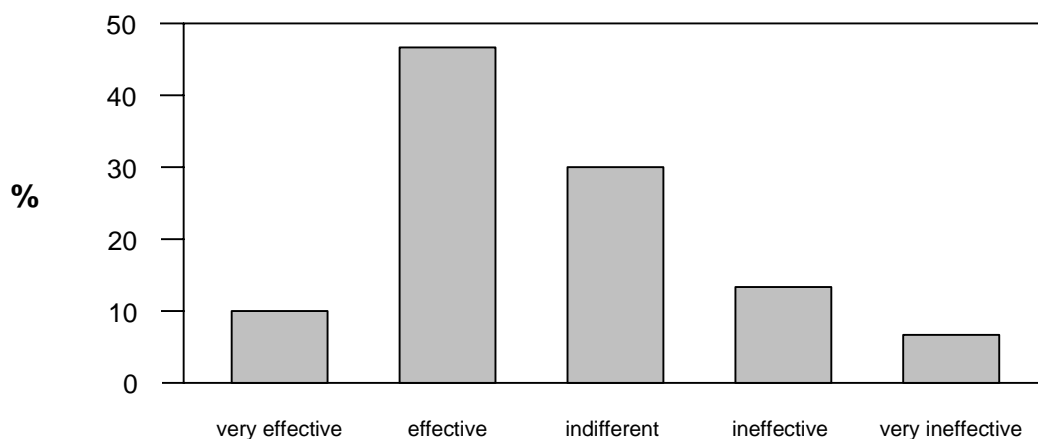


Figure 3: Effectiveness in leveraging knowledge (n=79)

Effectiveness of leveraging knowledge in participant companies

According to the literature on inter-organisational knowledge transfer, identification of the knowledge needs and external knowledge sources is just one stage of the whole inter-organisational knowledge transfer process. The remaining stages for SMEs are negotiation, selection, interaction and conversion (Chen *et al.*, 2006). SMEs need to go through these stages successfully and then effectively leverage the knowledge to improve their business performance. The survey result in figure 3 shows that only 56% of SMEs believed they were very effective or effective in leveraging knowledge from other companies to improve business performance. So, there is considerable room for SMEs to improve their ability to acquire the external knowledge successfully from the identified external sources and convert it into their own organisations.

How to improve SMEs' effectiveness in leveraging external knowledge

This section is structured in accordance with the five stages of inter-organisational knowledge transfer described in the previous paragraph. To achieve successful knowledge transfer, improve their effectiveness in leveraging external knowledge, and, at the same time, protect their own knowledge domain and intellectual capital (Quintas *et al.*, 1997; Beeby and Booth, 2000; Chen *et al.*, 2002; Mohr and Sengupta, 2002), relevant issues and corresponding strategies for SMEs are identified for each of the knowledge transfer stages

At the negotiation stage

The SME, as the receiving company, will negotiate with the giving company (computer service company, for example) so as to obtain the Internet marketing knowledge needed. The giving company will need to examine its own expected benefits and costs from the knowledge transaction before it makes the transfer decision. In doing this it may take into account factors such as the importance of the knowledge for itself, its business dependence on the receiving company, trust between the receiving company and itself, the receiving company's ability to reciprocate, and any relevant influences from a third party such as availability to the receiving company of alternative knowledge sources (Chen *et al.*, 2003). Because these factors will influence the giving company's transfer decision-making, then anything the (receiving) SME can do to influence the giving company positively about them will be to its own benefit.

At the selection stage

The SME will select an employee (or maybe several) as a receiving employee to acquire the knowledge needed from the giving company, which will similarly nominate one or several giving employees. The difference between the selection of a receiving employee and a giving employee is that the former requires absorptive capacity (Cohen and Levinthal, 1990; Chen *et al.*, 2002; Mohr and Sengupta, 2002; Holmqvist, 2003; Connell *et al.*, 2003). Moreover, the receiving employee is required to have motivation to learn (Szulanski, 2000; Huber, 2001; Goh, 2002), and also a certain theoretical knowledge background if the transferred knowledge is abstract or theoretical. In addition, the SME may positively try to acquire more knowledge than the giving company wants to offer. Good business practice dictates that the giving company wants to protect its knowledge from diffusion, and will hope only to contribute what it wants to transfer. But the knowledge transfer task is eventually carried out by the giving employee: his/her personal objectives may not be in accordance with the economic interests of his/her employer. So, there may be opportunities for the SME to acquire extra, high-value

knowledge from the giving employee. Therefore, the receiving employee is required reliably to do what the SME wants, and also be skilled in social interaction with the giving employee.

When it selects its receiving employee(s), the SME may consider factors such as trust with the receiving employee; the employee's absorptive capacity; motivation to learn; social interaction skills with the giving employee; prior experience; and theoretical knowledge in the area of the transferred knowledge.

At the interaction stage

The receiving employee will learn from the giving employee. The giving employee's openness will directly influence transfer effectiveness (Cohen and Levinthal, 1990; Chen *et al.*, 2002; Mohr and Sengupta, 2002). It is wise for the receiving employee to try his/her best to build up good relationship with the giving employee, and win her/his trust (at least, not disliked by her/him) so that the giving employee could raise her/his level of openness and the codification level of her/his knowledge.

In order to make sure that the receiving employee can acquire the knowledge needed from the giving employee, the SME may impose management control (e.g., training and guidance) on the receiving employee to make him/her to behave as it wants.

In addition, the duration and difficulty of knowledge transfer are thought of as being important factors that may lead to a close inter-personal relationship between the receiving and giving employees and thus will heavily influence the effectiveness of the knowledge transfer between the two employees (Mohr and Sengupta, 2002).

Based on this analysis, at the interaction stage, the SME, as the receiving company, is suggested to take into account the following factors: trust between the receiving and giving employees; management control of the receiving employee; and the duration and difficulty of the knowledge transfer.

At the conversion stage

The receiving employee's individual learning must be converted to the receiving company's organisational learning. In other words, the receiving employee transfers his/her acquired knowledge to the SME - his/her employer. The conversion stage is therefore actually a process of knowledge transfer within an organisation (Chen *et al.*, 2002).

Generally speaking, the receiving employee is a gatekeeper or boundary spanner of the SME, so the company will lose relevant knowledge and skills if he/she keeps his/her acquired knowledge for him/herself, or goes to work for another company (even the SME's competitors). So, the receiving employee's loyalty to the receiving company (i.e., the SME) is very important. Further, the SME should build up a trust-based organisational culture to enhance employees' loyalty, and use other motivation mechanisms to induce desirable knowledge transfer behaviour.

Moreover, even if the receiving employee would like to transfer his/her acquired knowledge to his/her colleagues within the SME, the conversion from individual learning to organisational learning may still suffer from some problems (e.g., opportunistic learning

(Kim, 1993)). So, the SME should set up an internal management mechanism for promoting the conversion of individual learning into organisational learning.

According to this analysis, at this conversion stage, the SME, as the receiving company, is suggested to take into account the following factors: the receiving employee's loyalty to the receiving company; internal management mechanism for promoting the conversion of individual learning into organisational learning; and trust-based corporate culture.

Conclusions

This research set out to investigate SMEs' needs for Internet marketing knowledge and their consequent inter-organisational knowledge transfer needs. The key findings of the investigation can be summarised as follows.

Almost all responding SMEs had access to the Internet at the time of the investigation. The main factors that drove them to use the Internet were "convenient communication" (84.0%), and "improving the range and quality of services offered" (56.8%). Their main purposes for using the Internet were e-mail (89%) and looking for business information (76.8%); only 22% used it for e-commerce transactions.

79% of participating SMEs had their own websites: over 40% of them had already existed for 3 years or more at the time of the survey. Most responding SMEs thought that their websites were very effective or effective in improving their communication and marketing. However, their effectiveness in reducing costs and e-commerce transactions was relatively poor.

"Knowledge and skills related to Internet marketing amongst a company's workforce", and "management willingness to adopt Internet marketing" were considered by most respondents (70.7% and 69.0 % respectively) as the most important factors for business success in Internet marketing.

Respondents generally perceived that their staff needed to enrich their knowledge, but the picture varied somewhat. 57.1% thought more knowledge about developing and implementing Internet marketing strategy was needed, while only 19.5% thought that that knowledge was already in place. By contrast, 46.8% thought that the required knowledge of designing the website structure and layout was already present, with only 32.3% saying that improvement was needed.

"Computer service companies" and "knowledge broker companies" were perceived by participating SMEs as the main sources from which they would obtain the knowledge needed, followed by "customers" as the third.

Only 56% of participating SMEs believed that they were very effective or effective in leveraging knowledge from other organisations to improve their business performance. Therefore, there is considerable potential for SMEs to improve their abilities in successfully acquiring knowledge from the identified external sources and transferring it for their organizational benefit.

SMEs are therefore suggested to consider the following important factors at each of the transfer stages. At the negotiation stage, the importance of the knowledge for the giving company, the receiving SME's business dependence on the giving company, trust between the

giving company and itself, its own ability to reciprocate to the giving company, and any relevant influences from a third party (e.g. availability of alternative knowledge sources) should be considered. At the selection stage, the SME ought to consider trust with the receiving employee; that employee's absorptive capacity; motivation to learn; social interaction skills with the giving employee; prior experience; and theoretical knowledge in the area of the transferred knowledge. At the interaction stage, the SME is suggested to take into account: trust between the receiving and giving employees; management control over the receiving employee; and the duration and difficulty of the knowledge transfer. At the conversion stage, the most important factors are suggested as: the receiving employee's loyalty to the SME; its internal management mechanism for promoting the conversion of individual learning into organisational learning; and a trust-based corporate culture.

Certain limitations of the study are recognised. Firstly, the study is based on the UK service sector; the results generated from this study may not be applicable to other industrial sectors or the same sector in other countries. Secondly, the sample selected is of small and medium-sized enterprises, the results may not be applicable to micro-companies (i.e. less than 10 employees) or larger companies (i.e. more than 249 employees).

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